

the vessel ready for inspection of electrical equipment and systems, including the following:

- (a) Inspection of all cable as far as practicable without undue disturbance of the cable or electrical apparatus;
- (b) Test of circuit breakers by manual operation;
- (c) Inspection of fuses including ensuring the ratings of fuses are suitable for the service intended;
- (d) Inspection of rotating electrical machinery essential to the routine operation of the vessel;
- (e) Inspection of all generators, motors, lighting fixtures and circuit interrupting devices located in spaces or areas that may contain flammable vapors;
- (f) Inspection of batteries for condition and security of stowage;
- (g) Operational test of electrical apparatus, which operates as part of or in conjunction with a fire detection or alarms system installed on board the vessel, by simulating, as closely as practicable, the actual operation in case of fire; and
- (h) Operational test of all emergency electrical systems.

#### § 176.808 Lifesaving

(a) At each initial and subsequent inspection for certification of a vessel, the owner or managing operator shall be prepared to conduct tests and have the vessel ready for inspection of lifesaving equipment and systems, including the following:

- (1) Tests of each rescue boat and each rescue boat launching appliance and survival craft launching appliance in accordance with § 185.520 of this chapter;
- (2) Inspection of each lifejacket, work vest, and marine buoyant device;
- (3) If used, inspection of the passenger safety orientation cards or pamphlets allowed by § 185.506(b)(2) of this chapter;
- (4) Inspection of each inflatable life-raft, inflatable buoyant apparatus, and inflatable lifejacket to determine that it has been serviced as required by § 185.730 of this chapter; and
- (5) Inspection of each hydrostatic release unit to determine that it is in compliance with the servicing and

usage requirements of § 185.740 of this chapter.

(b) Each item of lifesaving equipment determined by the marine inspector to not be in serviceable condition must be repaired or replaced.

(c) Each item of lifesaving equipment with an expiration date on it must be replaced if the expiration date has passed.

(d) The owner or managing operator shall destroy, in the presence of the marine inspector, each lifejacket, other personal floatation device, and other lifesaving device found to be defective and incapable of repair.

(e) At each initial and subsequent inspection for certification of a vessel, the vessel must be equipped with an adult size lifejacket for each person authorized. The vessel must also be equipped with child size lifejackets equal to at least:

- (1) 10 percent of the maximum number of passengers permitted to be carried unless children are prohibited from being carried aboard the vessel; or
- (2) 5 percent of the maximum number of passengers permitted to be carried if all extended size lifejackets are provided.

(f) Lifejackets, work vests, and marine buoyant devices may be marked with the date and marine inspection zone to indicate that they have been inspected and found to be in serviceable condition by a marine inspector.

(g) At each initial and subsequent inspection for certification, the marine inspector may require that an abandon ship or man overboard drill be held under simulated emergency conditions specified by the inspector.

[CGD 85-080, 61 FR 953, Jan. 10, 1996, as amended at 62 FR 51356, Sept. 30, 1997]

#### § 176.810 Fire protection.

(a) At each initial and subsequent inspection for certification, the owner or managing operator shall be prepared to conduct tests and have the vessel ready for inspection of its fire protection equipment, including the following:

- (1) Inspection of each hand portable fire extinguisher, semiportable fire extinguisher, and fixed gas fire extinguishing system to check for excessive corrosion and general condition;

(2) Inspection of piping, controls, and valves, and the inspection and testing of alarms and ventilation shutdowns, for each fixed gas fire extinguishing system and detecting system to determine that the system is in operating condition;

(3) Operation of the fire main system and checking of the pressure at the most remote and highest outlets;

(4) Testing of each fire hose to a test pressure equivalent to its maximum service pressure;

(5) Checking of each cylinder containing compressed gas to ensure it has been tested and marked in accordance with §147.60 in subchapter N of this chapter;

(6) Testing or renewal of flexible connections and discharge hoses on semiportable extinguishers and fixed gas extinguishing systems in accordance with §147.65 in subchapter N of this chapter; and

(7) Inspection and testing of all smoke and fire detection systems, including sensors and alarms.

(b) The owner, managing operator, or a qualified servicing facility as applicable shall conduct the following inspections and tests:

(1) For portable fire extinguishers, the inspections, maintenance procedures, and hydrostatic pressure tests required by Chapter 4 of NFPA 10 (in-

corporated by reference, 46 CFR 175.600) with the frequency specified by NFPA 10. In addition, carbon dioxide and Halon portable fire extinguishers must be refilled when the net content weight loss exceeds that specified for fixed systems by Table 176.810(b). The owner or managing operator shall provide satisfactory evidence of the required servicing to the marine inspector. If any of the equipment or records have not been properly maintained, a qualified servicing facility must be required to perform the required inspections, maintenance procedures, and hydrostatic pressure tests. A tag issued by a qualified servicing organization, and attached to each extinguisher, may be accepted as evidence that the necessary maintenance procedures have been conducted.

(2) For semiportable and fixed gas fire extinguishing systems, the inspections and tests required by Table 176.810(b)(2), in addition to the tests required by 46 CFR 147.60, 147.65, 147.66, and 147.67. The owner or managing operator must provide satisfactory evidence of the required servicing to the marine inspector. If any equipment or record has not been properly maintained, a qualified servicing facility may be required to perform the required inspections, maintenance procedures, and hydrostatic pressure tests.

TABLE 176.810(b)(2)—SEMIPORTABLE AND FIXED FIRE EXTINGUISHING SYSTEMS

Type system	Test
Carbon dioxide .....	Weigh cylinders. Recharge cylinder if weight loss exceeds 10 percent of the weight of the charge. Test time delays, alarms, and ventilation shutdowns with carbon dioxide, nitrogen, or other nonflammable gas as stated in the system manufacturer's instruction manual. Inspect hoses for damage or decay. Ensure that nozzles are unobstructed. Cylinders must be tested and marked, and all flexible connections on fixed carbon dioxide systems must be tested or renewed, as required by 46 CFR 147.60 and 147.65.
Halon 1301 and halocarbon.	Recharge or replace if weight loss exceeds 5 percent of the weight of the charge or if cylinder has a pressure gauge, recharge cylinder if pressure loss exceeds 10 percent, adjusted for temperature. Test time delays, alarms, and ventilation shutdowns with carbon dioxide, nitrogen, or other nonflammable gas as stated in the system manufacturer's instruction manual. Inspect hoses for damage or decay. Ensure that nozzles are unobstructed. Cylinders must be tested and marked, and all flexible connections to Halon 1301 and halocarbon cylinders must be tested or renewed, as required by 46 CFR 147.60 and 147.65 or 147.67. Note that Halon 1301 system approvals have expired, but that existing systems may be retained if they are in good and serviceable condition to the satisfaction of the Coast Guard inspector.
Dry chemical (cartridge operated).	Examine pressure cartridge and replace if end is punctured or if determined to have leaked or to be in unsuitable condition. Inspect hose and nozzle to see if they are clear. Insert charged cartridge. Ensure dry chemical is free flowing (not caked) and extinguisher contains full charge.
Dry chemical (stored pressure).	See that pressure gauge is in operating range. If not, or if the seal is broken, weigh or otherwise determine that extinguisher is fully charged with dry chemical. Recharge if pressure is low or if dry chemical is needed.
Foam (stored pressure).	See that any pressure gauge is in the operating range. If not, or if the seal is broken, weigh or otherwise determine that extinguisher is fully charged with foam. Recharge if pressure is low or if foam is needed. Replace premixed agent every 3 years.

TABLE 176.810(b)(2)—SEMI-PORTABLE AND FIXED FIRE EXTINGUISHING SYSTEMS—Continued

Type system	Test
Inert gas .....	Recharge or replace cylinder if cylinder pressure loss exceeds 5 percent of the specified gauge pressure, adjusted for temperature. Test time delays, alarms, and ventilation shutdowns with carbon dioxide, nitrogen, or other nonflammable gas as stated in the system manufacturer's instruction manual. Inspect hoses for damage or decay. Ensure that nozzles are unobstructed. Cylinders must be tested and marked, and all flexible connections on fixed inert extinguishers must be tested or renewed as required by 46 CFR 147.60 and 147.66.
Water mist .....	Maintain system in accordance with the maintenance instructions in the system manufacturer's design, installation, operation, and maintenance manual.

(c) The owner, managing operator, or master shall destroy, in the presence of the marine inspector, each fire hose found to be defective and incapable of repair.

(d) At each initial and subsequent inspection for certification, the marine inspector may require that a fire drill be held under simulated emergency conditions to be specified by the inspector.

[CGD 85-080, 61 FR 953, Jan. 10, 1996; 61 FR 20557, May 7, 1996, as amended at 62 FR 51356, Sept. 30, 1997; USCG-2003-16630, 73 FR 65205, Oct. 31, 2008; USCG-2006-24797, 77 FR 33890, June 7, 2012]

#### § 176.812 Pressure vessels and boilers.

(a) Pressure vessels must be tested and inspected in accordance with part 61, subpart 61.10, of this chapter.

(b) Periodic inspection and testing requirements for boilers are contained in §61.05 in subchapter F of this chapter.

[CGD 85-080, 61 FR 953, Jan. 10, 1996, as amended at 62 FR 51356, Sept. 30, 1997; USCG-1999-4976, 65 FR 6508, Feb. 9, 2000]

#### § 176.814 Steering systems.

At each initial and subsequent inspection for certification the owner or managing operator shall be prepared to test the steering systems of the vessel and make them available for inspection to the extent necessary to determine that they are in suitable condition and fit for the service intended. Servo-type power systems, such as orbital systems, must be tested and capable of smooth operation by a single person in the manual mode, with hydraulic pumps secured.

#### § 176.816 Miscellaneous systems and equipment.

At each initial and subsequent inspection for certification the owner or managing operator shall be prepared to test and make available for inspection all items in the ship's outfit, such as ground tackle, navigation lights and equipment, markings, and placards, which are required to be carried by the regulations in this subchapter, as necessary to determine that they are fit for the service intended.

[CGD 85-080, 61 FR 953, Jan. 10, 1996, as amended by USCG-2008-0906, 73 FR 56510, Sept. 29, 2008]

#### § 176.818 Sanitary inspection.

At each inspection for certification and at every other vessel inspection, quarters, toilet and washing spaces, galleys, serving pantries, lockers, and similar spaces may be examined to determine that they are serviceable and in a sanitary condition.

#### § 176.830 Unsafe practices.

(a) At each inspection for certification and at every other vessel inspection all observed unsafe practices, fire hazards, and other hazardous situations must be corrected and all required guards and protective devices must be in satisfactory condition.

(b) At each inspection for certification and at every other vessel inspection the bilges and other spaces may be examined to see that there is no excessive accumulation of oil, trash, debris, or other matter that might create a fire hazard, clog bilge pumping systems, or block emergency escapes.